

REMARKS

Claims 1-9 remain in this case for the Examiner's consideration.

A. Prior Art Rejections

1. The Invention

Applicants have invented a secure interrogation system for use with a hand-held weapon to identify whether a target is friendly or unfriendly. Applicants' interrogation system features a transmitting device attached to a hand-held weapon which transmits an inquiry to a target responder device in the form of directionally specific single electromagnetic pulses or short bursts of electromagnetic pulses which are staggered with different distances between pulses or short bursts of pulses in order to transmit coded information. Applicants' responder device has a sensor for detecting such electromagnetic pulses, an evaluation unit for processing such detected pulses and a transmitter for sending back a response to the transmitting device's inquiry. The response signal from the responder device can then be received by the transmitting unit.

2. The Cited Art Distinguished

Claims 1-3 and 7-9 have been rejected under 35 U.S.C. § 103(a) as being obvious over Yerbury et al.'s U.S. Patent No. 5,134,277 ("Yerbury patent") in view of Kiser's U.S. Patent No. 6,097,330 ("Kiser patent").

On the issue of "obviousness," the Patent Office bears the burden of establishing a case of *prima facie* obviousness. *In re Fine*, 837 F.2d 1071, 1074 (Fed.Cir. 1988). To determine whether or not the claimed subject matter can properly be viewed as being "obvious" under 35 U.S.C. § 103, "the scope and content of the prior art are to be determined; and the level of ordinary skill in the pertinent art resolved... Such secondary considerations as commercial success, long felt but unsolved need, failure of others, etc. might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 86 S.Ct. 684, 694, 15 L.Ed.2d 545 (1966). In order to

properly combine references for an obviousness determination, there must be a suggestion or motivation in the references to make such a combination. *In re Gordon*, 733 F.2d 900, 902 (Fed.Cir. 1984)("The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification"). With these legal principles in mind, the merits of the obviousness rejections will now be addressed.

The cited Yerbury patent discloses a livestock identification system. In the Yerbury system, each farm animal is given a "tag" which, when appropriately prompted, can send out a coded signal identifying the farm animal. In operation, a light gun sends out a general, uncoded signal consisting of pulses of light directed at the farm animal's tag. When the tag detects the light gun signal, it sends back a pre-programmed response signal which identifies the farm animal. This response signal is received by the light gun and used to display the identity of the farm animal.

The Kiser patent discloses a friendly fire avoidance system which is used to prevent aircraft from firing on friendly troops. In the Kiser system, the aircraft emits coded optical pulses in the direction of the troops in question. The aircraft's optical pulses are detected by a receiver carried by one or more of the troops. The receiver interprets the coded signal and, if appropriate, sends back a responsive set of pulses to the aircraft. When the aircraft receives the responsive pulses, it will determine whether or not the troops should be attacked.

Neither the Yerbury patent nor the Kiser patent disclose Applicants' invention of having a transmitting device attached to a hand-held weapon send a directionally specific single electromagnetic pulse or short bursts of electromagnetic pulses which are staggered with different distances between the pulses or short bursts of pulses in order to transmit coded information. First of all, since the Yerbury patent pertains to livestock identification rather than a "friend or foe" military identification, it is non-analogous art. Further, unlike the present invention, the Yerbury patent fails to disclose a coded interrogation signal, the staggering of light pulses with different distances to avoid enemy detection and any evaluation of the interrogation signal by Yerbury's "tag." Indeed, rather than evaluating a coded interrogation signal and sending back a calculated response as in the present invention, Yerbury's tag simply sends back an unvarying, rote response once a certain threshold of interrogation light is detected.

In the Office Action, the Examiner acknowledges that the Yerbury patent does not disclose a transmitting device which transmits an inquiry to a responder device in the form of short bursts of pulses in order to transmit coded information. To supply this missing teaching, the Examiner relies upon the Kiser patent. Yet, the Kiser patent is also non-analogous art because it pertains to the interaction between aircraft and troops while failing to disclose, as in the present invention, an interrogation system which can be used with a hand-held weapon. Moreover, like Yerbury, Kiser fails to disclose the staggering of light pulses with different distances to avoid enemy detection. For these reasons, the Yerbury patent cannot be combined with the Kiser patent to render any of Applicants' claims 1-3 and 7-9 unpatentable as being "obvious."

Applicants' Claim 4-6 have been rejected under 35 U.S.C. § 103(a) as being obvious over the Yerbury and Kiser patents further in view of one or more of Fuchter's U.S. Patent No. 6,140,982 ("Fuchter patent"), Udd's U.S. Patent No. 5,091,917 ("Udd patent") and Wagner's U.S. Patent No. 5,130,713 ("Wagner patent"). The Fuchter patent discloses a friend or foe identification system where the interrogator generates a continuous querying electromagnetic "wave" and receives a similar electromagnetic "wave" in response (see, col. 1, line 66 - col. 2, line 11). The Udd patent discloses a method of sorting signals received from a plurality of emitters. The Wagner patent appears to disclose a pulsed laser positioning device which works in combination with a high frequency or microwave range communication device to distinguish friend from foe.

Neither the Udd, Fuchter or Wagner patents disclose Applicants' invention of having a transmitting device attached to a hand-held weapon send a directionally specific single electromagnetic pulse or short bursts of electromagnetic pulses which are staggered with different distances between the pulses or short bursts of pulses in order to transmit coded information. For these reasons, neither the Udd, Fuchter or Wagner patents provide the teachings necessary, either alone or in combination with the Yerbury and Kiser patents, to render any of Applicants' claims unpatentable.

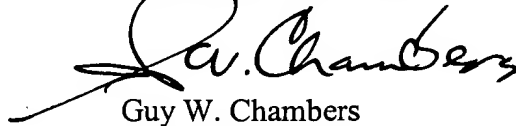
Appl. No. 09/592,179
Amdt. dated September 8, 2004
Reply to Office Action of March 12, 2004

PATENT

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (415) 576-0200.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Guy W. Chambers", with a stylized flourish at the end.

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